Satoshi Takeya

List of Publications by Year
in descending order

170	7,263	50276	66911
papers	citations	46 h-index	78 g-index

180	180	180	2781
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Gas hydrates in sustainable chemistry. Chemical Society Reviews, 2020, 49, 5225-5309.	38.1	443
2	Phase diagram, latent heat, and specific heat of TBAB semiclathrate hydrate crystals. Fluid Phase Equilibria, 2005, 234, 131-135.	2.5	335
3	Effects of Pore Sizes on Dissociation Temperatures and Pressures of Methane, Carbon Dioxide, and Propane Hydrates in Porous Media. Journal of Physical Chemistry B, 2002, 106, 820-826.	2.6	239
4	Tetra-n-butylammonium bromideâ€“water (1/38). Acta Crystallographica Section C: Crystal Structure Communications, 2005, 61, o65-o66.	0.4	214
5	Freezing-Memory Effect of Water on Nucleation of CO2Hydrate Crystals. Journal of Physical Chemistry B, 2000, 104, 4164-4168.	2.6	194
6	Direct Space Methods for Powder X-ray Diffraction for Guestâ^'Host Materials: Applications to Cage Occupancies and Guest Distributions in Clathrate Hydrates. Journal of the American Chemical Society, 2010, 132, 524-531.	13.7	190
7	Separation of Gas Molecule Using Tetra-n-butyl Ammonium Bromide Semi-Clathrate Hydrate Crystals. Japanese Journal of Applied Physics, 2003, 42, L129-L131.	1.5	168
8	Clathrate Hydrate Formed with Methane and 2-Propanol:Â Confirmation of Structure II Hydrate Formation. Industrial & Engineering Chemistry Research, 2004, 43, 4964-4966.	3.7	144
9	In Situ X-ray Diffraction Measurements of the Self-Preservation Effect of CH4 Hydrate. Journal of Physical Chemistry A, 2001, 105, 9756-9759.	2.5	143
10	Decomposition of methane hydrates in sand, sandstone, clays, and glass beads. Journal of Geophysical Research, 2004, 109, .	3.3	139
11	Natural gas storage and transportation within gas hydrate of smaller particle: Size dependence of self-preservation phenomenon of natural gas hydrate. Chemical Engineering Science, 2014, 118, 208-213.	3.8	136
12	Carbon nanotube-copper exhibiting metal-like thermal conductivity and silicon-like thermal expansion for efficient cooling of electronics. Nanoscale, 2014, 6, 2669-2674.	5.6	128
13	Dissociation Behavior of Clathrate Hydrates to Ice and Dependence on Guest Molecules. Angewandte Chemie - International Edition, 2008, 47, 1276-1279.	13.8	127
14	Kinetics and Stability of CH4-CO2 Mixed Gas Hydrates during Formation and Long-Term Storage. ChemPhysChem, 2005, 6, 646-654.	2.1	121
15	O8Cluster Structure of the Epsilon Phase of Solid Oxygen. Physical Review Letters, 2006, 97, 085503.	7.8	115
16	Self-preservation effect and dissociation rates of CH4 hydrate. Journal of Crystal Growth, 2002, 237-239, 379-382.	1.5	112
17	Particle size effect of <mml:math altimg="si18.gif" display="inline" overflow="scroll" xmlns:xocs="http://www.elsevier.com/xml/xocs/dtd" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.elsevier.com/xml/ja/dtd" xmlns:ja="http://www.elsevier.com/xml/ja/dtd" xmlns:mml="http://www.w3.org/1998/Math/MathML" xmlns:tb="http://www.elsevier.com/xml/common/table/dtd" xmlns:sb="http://www.elsevier.com/xml/common/struct-bib/dtd" xmlns:ce="http://www.els- Chemical E	3.8	112
18	Anomalous Preservation of CH₄ Hydrate and its Dependence on the Morphology of Hexagonal Ice. ChemPhysChem, 2010, 11, 70-73.	2.1	112

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19	Gas Separation Method Using Tetra-n-butyl Ammonium Bromide Semi-Clathrate Hydrate. Japanese Journal of Applied Physics, 2004, 43, 362-365.	1.5	110
20	Hydrogen-bonding alcohol-water interactions in binary ethanol, 1-propanol, and 2-propanol+methane structure II clathrate hydrates. Journal of Chemical Physics, 2010, 133, 074505.	3.0	110
21	Texture Change of Ice on Anomalously Preserved Methane Clathrate Hydrate. Journal of Physical Chemistry B, 2005, 109, 5802-5807.	2.6	107
22	Effect of Long-Term Storage and Thermal History on the Gas Content of Natural Gas Hydrate Pellets under Ambient Pressure. Energy & Fuels, 2015, 29, 4827-4834.	5.1	107
23	Spectroscopic Observations and Thermodynamic Calculations on Clathrate Hydrates of Mixed Gas Containing Methane and Ethane:Â Determination of Structure, Composition and Cage Occupancy. Journal of Physical Chemistry B, 2002, 106, 12426-12431.	2.6	98
24	Structure and thermal expansion of natural gas clathrate hydrates. Chemical Engineering Science, 2006, 61, 2670-2674.	3.8	85
25	Nondestructive Imaging of Anomalously Preserved Methane Clathrate Hydrate by Phase Contrast X-ray Imaging. Journal of Physical Chemistry C, 2011, 115, 16193-16199.	3.1	82
26	Two-step formation of methane-propane mixed gas hydrates in a batch-type reactor. AICHE Journal, 2004, 50, 518-523.	3.6	81
27	Clathrate hydrate crystal growth in liquid water saturated with a hydrate-forming substance: variations in crystal morphology. Philosophical Magazine, 2004, 84, 1-16.	1.6	79
28	Anomalously Preserved Clathrate Hydrate of Natural Gas in Pellet Form at 253 K. Journal of Physical Chemistry C, 2012, 116, 13842-13848.	3.1	78
29	Thermodynamic properties of ionic semiclathrate hydrate formed with tetrabutylphosphonium bromide. Fluid Phase Equilibria, 2012, 317, 25-28.	2.5	78
30	CO2 hydrate film formation at the boundary between CO2 and water: effects of temperature, pressure and additives on the formation rate. Journal of Crystal Growth, 2002, 237-239, 383-387.	1.5	69
31	Characterization of tetra-n-butylphosphonium bromide semiclathrate hydrate by crystal structure analysis. CrystEngComm, 2014, 16, 2056-2060.	2.6	65
32	Synthesis, characterization and thermal-property measurements of ionic semi-clathrate hydrates formed with tetrabutylphosphonium chloride and tetrabutylammonium acrylate. RSC Advances, 2011, 1, 315.	3.6	61
33	Thermophysical properties of trimethylolethane (TME) hydrate as phase change material for cooling lithium-ion battery in electric vehicle. Journal of Power Sources, 2019, 427, 70-76.	7.8	60
34	Structural Investigation of Methane Hydrate Sediments by Microfocus X-ray Computed Tomography Technique under High-Pressure Conditions. Japanese Journal of Applied Physics, 2006, 45, L714-L716.	1.5	58
35	Incommensurate composite crystal structure of scandium-II. Physical Review B, 2005, 72, .	3.2	57
36	Clathrate hydrate formation in (methane+water+methylcyclohexanone) systems: the first phase equilibrium data. Journal of Chemical Thermodynamics, 2003, 35, 2045-2054.	2.0	56

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37	Measurements of physical properties of gas hydrates and in situ observations of formation and decomposition processes via Raman spectroscopy and X-ray diffraction. Canadian Journal of Physics, 2003, 81, 351-357.	1.1	51
38	A New Method for Separating HFC-134a from Gas Mixtures Using Clathrate Hydrate Formation. Environmental Science & Technology, 2004, 38, 4635-4639.	10.0	51
39	Incommensurate Structure of Phosphorus Phase IV. Physical Review Letters, 2007, 98, .	7.8	51
40	Binary Ethanolâ^'Methane Clathrate Hydrate Formation in the System CH₄-C₂H₅OH-H₂O: Confirmation of Structure II Hydrate Formation. Journal of Physical Chemistry C, 2009, 113, 12598-12601.	3.1	51
41	Clathrate-hydrate formation from a hydrocarbon gas mixture: Compositional evolution of formed hydrate during an isobaric semi-batch hydrate-forming operation. Applied Energy, 2014, 113, 864-871.	10.1	51
42	Preservation of CO2 hydrate under different atmospheric conditions. Fluid Phase Equilibria, 2016, 413, 137-141.	2.5	51
43	Phase Equilibrium for Structure-H Hydrates Formed with Methane and either Pinacolone (3,3-Dimethyl-2-butanone) or Pinacolyl Alcohol (3,3-Dimethyl-2-butanol). Journal of Chemical & Engineering Data, 2003, 48, 1337-1340.	1.9	50
44	Coexistence of structure I and II hydrates formed from a mixture of methane and ethane gases. Canadian Journal of Physics, 2003, 81, 479-484.	1.1	50
45	Structure Analyses of Artificial Methane Hydrate Sediments by Microfocus X-ray Computed Tomography. Japanese Journal of Applied Physics, 2004, 43, 5673-5675.	1.5	47
46	Methane storage in water frameworks: Self-preservation of methane hydrate pellets formed from NaCl solutions. Applied Energy, 2018, 230, 86-93.	10.1	47
47	In Situ Observation of CO₂ Hydrate by Xâ€ray Diffraction. Annals of the New York Academy of Sciences, 2000, 912, 973-982.	3.8	46
48	Phase Equilibrium Measurements and Crystallographic Analyses on Structure-H Type Gas Hydrate Formed from the CH4â^'CO2â^'Neohexaneâ^'Water System. Journal of Physical Chemistry B, 2006, 110, 4583-4588.	2.6	45
49	Phase Behavior and Structural Characterization of Ionic Clathrate Hydrate Formed with Tetra-n-butylphosphonium Hydroxide: Discovery of Primitive Crystal Structure. Crystal Growth and Design, 2015, 15, 3862-3867.	3.0	45
50	Spectroscopic Measurements on Binary, Ternary, and Quaternary Mixed-Gas Molecules in Clathrate Structures. Industrial & Engineering Chemistry Research, 2007, 46, 5080-5087.	3.7	42
51	Synthesis and characterization of clathrate hydrates containing carbon dioxide and ethanol. Physical Chemistry Chemical Physics, 2010, 12, 9927.	2.8	41
52	Preservation phenomena of methane hydrate in pore spaces. Physical Chemistry Chemical Physics, 2011, 13, 17449.	2.8	40
53	Distortion of the Large Cages Encapsulating Cyclic Molecules and Empty Small Cages of Structure II Clathrate Hydrates. Journal of Physical Chemistry C, 2018, 122, 18134-18141.	3.1	40
54	Methane Clathrate Hydrates Formed within Hydrophilic and Hydrophobic Media: Kinetics of Dissociation and Distortion of Host Structure. Journal of Physical Chemistry C, 2013, 117, 7081-7085.	3.1	39

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55	Dissociation behaviors of methane hydrate formed from NaCl solutions. Fluid Phase Equilibria, 2016, 413, 22-27.	2.5	39
56	Gas-Phase Synthesis and Characterization of CH₄-Loaded Hydroquinone Clathrates. Journal of Physical Chemistry B, 2010, 114, 3254-3258.	2.6	38
57	Ca-VII: A Chain Ordered Host-Guest Structure of Calcium above 210ÂGPa. Physical Review Letters, 2013, 110, 235501.	7.8	38
58	Lattice Expansion of Clathrate Hydrates of Methane Mixtures and Natural Gas. Angewandte Chemie - International Edition, 2005, 44, 6928-6931.	13.8	36
59	Preservation of Carbon Dioxide Clathrate Hydrate at Temperatures below the Water Freezing Point under Atmospheric Pressure. Industrial & Engineering Chemistry Research, 2011, 50, 13854-13858.	3.7	36
60	Molecular Storage of Ozone in a Clathrate Hydrate Formed from an O₃+O₂+CO₂ Gas Mixture. Angewandte Chemie - International Edition, 2011, 50, 10340-10343.	13.8	36
61	Phase equilibrium and characterization of ionic clathrate hydrates formed with tetra- n -butylammonium bromide and nitrogen gas. Fluid Phase Equilibria, 2016, 413, 249-253.	2.5	36
62	Crystal Lattice Size and Stability of Type H Clathrate Hydrates with Various Large-Molecule Guest Substances. Journal of Physical Chemistry B, 2006, 110, 12943-12947.	2.6	35
63	Characterization of clathrate hydrates formed with CH4 or CO2 plus tetrahydropyran. Fuel, 2014, 122, 270-276.	6.4	35
64	Distribution of Butane in the Host Water Cage of Structureâ€…II Clathrate Hydrates. Chemistry - A European Journal, 2014, 20, 17207-17213.	3.3	34
65	Phase Equilibrium for Structure II Hydrates Formed with Krypton Co-existing with Cyclopentane, Cyclopentene, or Tetrahydropyran. Journal of Chemical & Engineering Data, 2006, 51, 1880-1883.	1.9	32
66	Effect of Guest Size and Conformation on Crystal Structure and Stability of Structure H Clathrate Hydrates: Experimental and Molecular Dynamics Simulation Studies. Journal of Physical Chemistry C, 2013, 117, 10473-10482.	3.1	31
67	Anisotropic Lattice Expansion of Structure H Clathrate Hydrates Induced by Help Guest: Experiments and Molecular Dynamics Simulations. Journal of Physical Chemistry C, 2014, 118, 21323-21330.	3.1	31
68	Structural Transition of the Methaneâ€“Ethane Mixture Hydrate in a Hydrate/Water/Hydrocarbon Three-Phase Coexistence System: Effect of Gas Concentration. ACS Sustainable Chemistry and Engineering, 2020, 8, 16924-16937.	6.7	31
69	Clathrate hydrate formation in the system methane + 3-methyl-1-butanol + water: equilibrium data and crystallographic structures of hydrates. Fluid Phase Equilibria, 2004, 221, 151-156.	2.5	30
70	Distribution of Hydrate Saturation Ratios in Artificial Methane Hydrate Sediments Measured by High-Speed X-Ray Computerized Tomography. Japanese Journal of Applied Physics, 2005, 44, 473-475.	1.5	27
71	Clathrate Hydrates for Ozone Preservation. Journal of Physical Chemistry B, 2010, 114, 11430-11435.	2.6	27
72	Observation of low-temperature object by phase-contrast x-ray imaging: Nondestructive imaging of air clathrate hydrates at 233K. Review of Scientific Instruments, 2006, 77, 053705.	1.3	26

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73	Diffraction-enhanced X-ray imaging under low-temperature conditions: non-destructive observations of clathrate gas hydrates. Journal of Synchrotron Radiation, 2012, 19, 1038-1042.	2.4	25
74	Imaging and density mapping of tetrahydrofuran clathrate hydrates by phase-contrast x-ray computed tomography. Applied Physics Letters, 2007, 90, 081920.	3.3	24
75	Estimation of Gas Composition and Cage Occupancies in CH₄-C₂H₆ Hydrates by CP-MAS ¹³C NMR Technique. Journal of the Japan Petroleum Institute, 2007, 50, 132-138.	0.6	24
76	Synthesis and characterization of a structure H hydrate formed with carbon dioxide and 3,3-dimethyl-2-butanone. Chemical Communications, 2013, 49, 505-507.	4.1	23
77	Preservation of carbon dioxide clathrate hydrate coexisting with sucrose under domestic freezer conditions. Journal of Food Engineering, 2014, 120, 69-74.	5.2	23
78	Structure and Guest Dynamics in Binary Clathrate Hydrates of Tetrahydropyran with Carbon Dioxide/Methane. Journal of Physical Chemistry C, 2015, 119, 25738-25746.	3.1	23
79	Phase Equilibrium for Structure I and Structure H Hydrates Formed with Methylfluoride and Methylcyclohexane. Journal of Chemical & Engineering Data, 2007, 52, 635-638.	1.9	22
80	Hydration structures of lactic acid: characterization of the ionic clathrate hydrate formed with a biological organic acid anion. Physical Chemistry Chemical Physics, 2014, 16, 21467-21472.	2.8	22
81	Characterization of the ionic clathrate hydrate of tetra-<i>n</i>-butylammonium acrylate. Canadian Journal of Chemistry, 2015, 93, 954-959.	1.1	22
82	Enhanced Hydrogen-Storage Capacity and Structural Stability of an Organic Clathrate Structure with Fullerene (C₆₀) Guests and Lithium Doping. Chemistry of Materials, 2018, 30, 3028-3039.	6.7	22
83	Lattice Constants and Thermal Expansion Coefficient of Air Clathrate Hydrate in Deep Ice Cores from Vostok, Antarctica. Journal of Physical Chemistry B, 2000, 104, 668-670.	2.6	21
84	Viscosity of Aqueous CO2Solutions Measured by Dynamic Light Scattering. Journal of Chemical & Engineering Data, 2003, 48, 1225-1229.	1.9	21
85	Characterization of the Clathrate Hydrate Formed with Methane and Propan-1-ol. Industrial & Engineering Chemistry Research, 2009, 48, 9335-9337.	3.7	21
86	Crystal structure of anhydrous 5-aminotetrazole and its high-pressure behavior. CrystEngComm, 2011, 13, 99-102.	2.6	21
87	Thermodynamic stabilization of semiclathrate hydrates by hydrophilic group. RSC Advances, 2017, 7, 13590-13594.	3.6	21
88	Structure and Density Comparison of Noble Gas Hydrates Encapsulating Xenon, Krypton and Argon. ChemPhysChem, 2019, 20, 2518-2524.	2.1	21
89	Phase Equilibrium for Structure-H Hydrate Formed with Krypton and 2,2-Dimethylbutane. Journal of Chemical & Engineering Data, 2006, 51, 161-163.	1.9	20
90	Disorder of Hydrofluorocarbon Molecules Entrapped in the Water Cages of Structureâ€…I Clathrate Hydrate. Chemistry - A European Journal, 2016, 22, 7567-7573.	3.3	20

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91	Design of Ecological CO2 Enrichment System for Greenhouse Production using TBAB + CO2 Semi-Clathrate Hydrate. Energies, 2017, 10, 927.	3.1	20
92	Effects of temperature cycling on the phase transition of water in gas-saturated sediments. Canadian Journal of Physics, 2003, 81, 343-350.	1.1	19
93	Phase Equilibrium for Structure II Hydrates Formed with Methylfluoride Coexisting with Cyclopentane, Fluorocyclopentane, Cyclopentene, or Tetrahydropyran. Journal of Chemical & Engineering Data, 2008, 53, 531-534.	1.9	18
94	Powder X-ray diffraction observations of ice crystals formed from disaccharide solutions. Physical Chemistry Chemical Physics, 2010, 12, 15034.	2.8	18
95	Preservation of carbon dioxide clathrate hydrate in the presence of trehalose under freezer conditions. Scientific Reports, 2016, 6, 19354.	3.3	18
96	CO2 processing and hydration of fruit and vegetable tissues by clathrate hydrate formation. Food Chemistry, 2016, 205, 122-128.	8.2	18
97	Thermodynamic Properties and Crystallographic Characterization of Semiclathrate Hydrates Formed with Tetra-n-butylammonium Glycolate. ACS Omega, 2019, 4, 7317-7322.	3.5	18
98	Raman spectroscopic observations of methane-hydrate formation and hydrophobic hydration around methane molecules in solution. Canadian Journal of Physics, 2003, 81, 359-366.	1.1	17
99	An experimental study of gas-hydrate formation by measuring viscosity and infrared spectra. Canadian Journal of Physics, 2003, 81, 485-492.	1.1	17
100	Phase Transition of a Structureâ€…II Cubic Clathrate Hydrate to a Tetragonal Form. Angewandte Chemie - International Edition, 2016, 55, 9287-9291.	13.8	17
101	Continuous CO₂ Separation from a N₂ + CO₂ Gas Mixture Using Clathrate Hydrate: Insights into Sustainable Post-combustion Carbon Capture. Energy & Fuels, 2022, 36, 10601-10609.	5.1	17
102	Highly Selective Encaging of Carbon Dioxide Molecules in the Mixed Carbon Dioxide and Nitrogen Hydrate at Low Temperatures. Journal of Physical Chemistry B, 2006, 110, 17595-17599.	2.6	16
103	13C Chemical Shifts of Propane Molecules Encaged in Structure II Clathrate Hydrate. Journal of Physical Chemistry A, 2011, 115, 643-647.	2.5	16
104	Formation of Methane Clathrate Hydrates in Coal Moisture: Implications for Coalbed Methane Resources and Reservoir Pressures. Energy & Fuels, 2016, 30, 88-97.	5.1	16
105	Bulk phase behavior of tetra-n-butylammonium bromide hydrates formed with carbon dioxide or methane gas. Korean Journal of Chemical Engineering, 2016, 33, 1917-1921.	2.7	16
106	Hydrogen Molecules Trapped in Interstitial Host Channels of Î±â€Hydroquinone. ChemPhysChem, 2009, 10, 352-355.	2.1	14
107	Effect of nitrogen atom substitution in cyclic guests on properties of structure H clathrate hydrates. Canadian Journal of Chemistry, 2015, 93, 906-912.	1.1	14
108	Design of Thermophysical Properties of Semiclathrate Hydrates Formed by Tetra-n-butylammonium Hydroxybutyrate. Industrial & Engineering Chemistry Research, 2018, 57, 3059-3064.	3.7	14

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109	Anisotropy of dodecahedral water cages for guest gas occupancy in semiclathrate hydrates. Chemical Communications, 2019, 55, 10150-10153.	4.1	14
110	Phase Equilibrium for Structure-H Hydrates Formed with Methane and Methyl-Substituted Cyclic Ether. International Journal of Thermophysics, 2005, 26, 1515-1523.	2.1	13
111	Enclathration of hydrogen by organic-compound clathrate hydrates. Chemical Engineering Science, 2011, 66, 2417-2420.	3.8	13
112	Phase-contrast X-ray imaging system with sub-mg/cm³density resolution. Journal of Physics: Conference Series, 2013, 425, 192007.	0.4	13
113	Phase equilibrium and crystallographic structure of clathrate hydrate formed in argon+2,2-dimethylbutane+water system. Fluid Phase Equilibria, 2014, 365, 64-67.	2.5	13
114	Superheating Clathrate Hydrates for Anomalous Preservation. Journal of Physical Chemistry C, 2018, 122, 17019-17023.	3.1	13
115	Molecular Storage of Ozone in a Clathrate Hydrate: An Attempt at Preserving Ozone at High Concentrations. PLoS ONE, 2012, 7, e48563.	2.5	13
116	Development of dual functional methodology for seawater desalination and salt manufacture by carbon dioxide hydrate formation. Desalination, 2022, 539, 115937.	8.2	13
117	Phase Equilibrium for Structure H Hydrates Formed with Methane plus Cycloheptane, Cycloheptanone, or Oxacycloheptane. Journal of Chemical & Engineering Data, 2010, 55, 3059-3062.	1.9	12
118	Phonon behaviors and electronic structures of the filled skutterudite YbyCo4Sb12 compounds: An electron tunneling study. Journal of Applied Physics, 2002, 92, 4135-4137.	2.5	11
119	Phase transition in a superprotonic conductor Cs2(HSO4)(H2PO4) induced by water vapor. Solid State Ionics, 2006, 177, 1275-1279.	2.7	11
120	Increasing molecular O₃ storage capacity in a clathrate hydrate. New Journal of Chemistry, 2014, 38, 3160-3165.	2.8	11
121	Gas-containing semiclathrate hydrate formation by tetra- n -butylammonium carboxylates: Acrylate and butyrate. Fluid Phase Equilibria, 2017, 441, 59-63.	2.5	11
122	Advanced X-ray imaging at beamline 07 of the SAGA Light Source. Journal of Synchrotron Radiation, 2021, 28, 1966-1977.	2.4	11
123	Probing Fickian and Non-Fickian Diffusion of CO2in Poly(methyl methacrylate) Using in Situ Raman Spectroscopy and Microfocus X-ray Computed Tomography. Macromolecules, 2004, 37, 9302-9304.	4.8	10
124	Phase Equilibrium and Crystallographic Structures of Clathrate Hydrates Formed in Methane + 2,2-Dimethylpentane + Water System. Journal of Chemical & Engineering Data, 2008, 53, 2820-2823.	1.9	10
125	Molecular Cage Occupancy of Clathrate Hydrates at Infinite Dilution: Experimental Determination and Thermodynamic Significance. Journal of Physical Chemistry B, 2010, 114, 804-808.	2.6	10
126	Characterization of the Clathrate Hydrate Formed with Fluoromethane and Pinacolone: The Thermodynamic Stability and Volumetric Behavior of the Structure H Binary Hydrate. Journal of Physical Chemistry B, 2021, 125, 328-337.	2.6	10

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127	Structural CO₂ capture preference of semiclathrate hydrate formed with tetra-n-butylammonium chloride. CrystEngComm, 2022, 24, 4366-4371.	2.6	10
128	X-ray Imaging of Clathrate Hydrates as Gas Storage Materials: Absorption Contrast of Low-Density and Low-Absorption Materials Using Energy-Dependent X-ray Computed Tomography. Energy & Fuels, 2022, 36, 10659-10666.	5.1	10
129	A combined method implementing both xenon hydrate formation and the freezing process for the preservation of barley as a simulated food. Journal of Food Engineering, 2015, 165, 104-111.	5.2	9
130	A cooling and CO2 enrichment system for greenhouse production using CO2 clathrate hydrate. Engineering in Agriculture, Environment and Food, 2015, 8, 307-312.	0.5	9
131	X-ray CT observation and characterization of water transformation in heavy objects. Physical Chemistry Chemical Physics, 2020, 22, 3446-3454.	2.8	9
132	A Series of Dâ€“Aâ€“D Structured Disilane-Bridged Triads: Structure and Stimuli-Responsive Luminescence Studies. Journal of Organic Chemistry, 2022, 87, 8928-8938.	3.2	9
133	Phase-contrast X-ray imaging of the gas diffusion layer of fuel cells. Journal of Synchrotron Radiation, 2010, 17, 813-816.	2.4	8
134	A Feasibility Study on Hydrate-Based Technology for Transporting CO2 from Industrial to Agricultural Areas. Energies, 2017, 10, 728.	3.1	8
135	Phase equilibria for Kr hydrate formed with 2,2-dimethylbutane, methylcyclohexane and 1-methylpiperidine. Journal of Chemical Thermodynamics, 2018, 117, 21-26.	2.0	8
136	Phase Equilibrium of Isotopologue Methane Hydrates Enclathrated CH3D and CD4. Journal of Chemical & Engineering Data, 2018, 63, 2266-2270.	1.9	8
137	Slow Crystal Growth of Cubic Ice with Stacking Faults in a Glassy Dilute Glycerol Aqueous Solution. Journal of Physical Chemistry Letters, 2020, 11, 9432-9438.	4.6	8
138	Extremely Slow Diffusion of Argon Atoms in Clathrate Cages: Implications for Gas Storage in Solid Materials. ACS Sustainable Chemistry and Engineering, 2021, 9, 7479-7488.	6.7	8
139	Distortion of the Host Water Cages of Structure I Gas Hydrates: Structural Analysis of C₂H₄ Hydrate by Powder X-ray Diffraction. Journal of Physical Chemistry C, 2021, 125, 28150-28156.	3.1	8
140	Superheating of Structure I Gas Hydrates within the Structure II Cyclopentane Hydrate Shell. Journal of Physical Chemistry Letters, 2022, 13, 2130-2136.	4.6	8
141	Phase Transition Analysis of 5-Aminotetrazole from Room Temperature to the Melting Point. Journal of Physical Chemistry B, 2010, 114, 12572-12576.	2.6	7
142	Physical Properties and Characterization of the Binary Clathrate Hydrate with Methane + 1,1,1,3,3-Pentafluoropropane (HFC-245fa) + Water. Journal of Physical Chemistry C, 2020, 124, 20736-20745.	3.1	7
143	X-Ray attenuation and image contrast in the X-ray computed tomography of clathrate hydrates depending on guest species. Physical Chemistry Chemical Physics, 2020, 22, 27658-27665.	2.8	7
144	Growth of internal melt figures in superheated ice. Applied Physics Letters, 2006, 88, 074103.	3.3	6

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145	Observation of the growth process of icy materials in interparticle spaces: phase-contrast X-ray imaging of clathrate hydrate. Canadian Journal of Chemistry, 2015, 93, 983-987.	1.1	6
146	Effect of Nonspherical Encapsulated Guests on the Volumetric Behavior of Structure H Clathrate Hydrates. Journal of Physical Chemistry C, 2018, 122, 27631-27639.	3.1	6
147	Development and Continuous Operation of a Benchâ€Scale System for the Production of O₃â€‰+â€‰O₂â€‰+â€‰CO₂ Hydrates. Chemical Engineering and Technology, 2020, 43, 2307-2314.	1.5	6
148	Hydrogen Storage in Propane-Hydrate: Theoretical and Experimental Study. Applied Sciences (Switzerland), 2020, 10, 8962.	2.5	6
149	Effect of Help-Guest Size and Hydrogen Bonding on the Stability of N-Methylpiperidine Structure H Clathrate Hydrate. Journal of Physical Chemistry C, 2020, 124, 5978-5986.	3.1	6
150	Characterization of clathrate hydrate formed in H2Â+ÂCO2Â+ÂtetrahydropyranÂ+Âwater system as carbon capture materials. Fuel, 2021, 295, 120593.	6.4	6
151	Phase-Contrast X-ray Images of Ice and Water on Carbon Paper for Fuel Cells Measured by Diffraction-Enhanced Imaging Technique. Japanese Journal of Applied Physics, 2013, 52, 048002.	1.5	5
152	Phase Transition of a Structureâ€…II Cubic Clathrate Hydrate to a Tetragonal Form. Angewandte Chemie, 2016, 128, 9433-9437.	2.0	5
153	On effective radii of dodecahedral cages in semiclathrate hydrates for van der Waals and Platteeuw model. Fluid Phase Equilibria, 2021, 527, 112846.	2.5	5
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